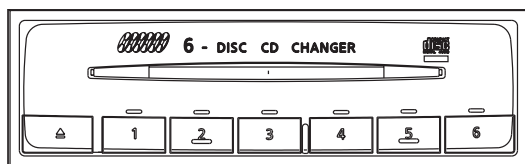
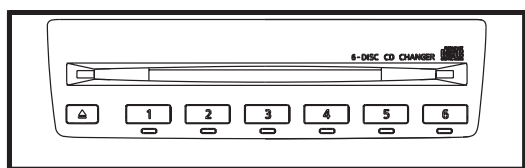


# Service Manual



PP-2538T



PN-2541K

## NISSAN Automobile Genuine 6-Disc CD Changer Deck

**Model PP-2538T**  
(Genuine No.28184 4M560  
/ID No.CE030)

**Model PN-2541K**  
(Genuine No.28184 AR260)

## SPECIFICATIONS

Output level:	3.0V +2/-2dB(at 1kHz)
Frequency Response:	17Hz to 20kHz +2/-2dB
Separation:	More than 70dB (at 1kHz, Filter:20kHz LPF)
Distortion:	Less than 0.02% (at 1kHz, Filter:20kHz LPF)
Power supply voltage:	DC13.2V Negative ground
Current consumption:	0.6A(during playing)
Dimensions(mm):	184(W) x56(H) x197.5(D)
Weight:	1.65kg

## COMPONENTS

PN-2541K-A/PP-2538T-A

Main unit	-----	1
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## NOTE

- \* Specifications and design are subject to change without notice for further improvement.
- \* We cannot supply PWB with component parts in principle.  
When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.

## To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

### 1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as re-modeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

### 2. Place the parts and wiring back in their original positions after replacement or re-wiring.

For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.

If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

### 3. Check for safety after repair.

Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary problems around the repaired spots.

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

### 4. Caution in removal and making wiring connection to the parts for the automobile.

Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

## 5. Cautions regarding chips.

Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.

## 6. Cautions in handling flexible PWB

Before working with a soldering iron, make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly (more than three times) to the same patterns. Also take care not to apply the tip with force.

## 7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

## 8. Cautions in checking that the optical pickup lights up.

The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.

## 9. Cautions in handling the optical pickup

The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

### 9-1. Laser diode

The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

### 9-2. Actuator

The actuator has a powerful magnetic circuit. If a magnetic material is put close to it. Its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

### 9-3. Cleaning the lens

Dust on the optical lens affects performance. To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

pin 14: CONNECT VDD: - : Connect to the VDD.

pin 15: BLKCK :IN: The sub code block clock input.

pin 16: ACC DET :IN: ACC detection signal input.

pin 17: BU DET :IN: Backup detection signal input.

pin 18: SW 9V :O: 9V power supply control.

pin 19: BEEP :O: Beep out.

pin 20: REQ O :O: Transmit request signal output.

pin 21: ILL CNT :O: The illumination control.

pin 22: T DATA :O: The display data output for the test mode indication.

pin 23: PON 2 :O: Power ON signal output.

pin 24: TX :O: Serial data output of N-BUS.

pin 25: RX :IN: Serial data input of N-BUS.

pin 26: NU : - : Not in use.

pin 27: A MUTE :O: The audio mute signal output.

pin 28: M DATA :O: The command data output to the CD IC.

pin 29: STAT :IN: The status data input from the CD IC.

pin 30: M CLK :O: The clock pulse output to the CD IC.

pin 31: LIMIT :IN: Sled limit switch signal input.

pin 32: SW 1 :IN: The switch signal input.

pin 33: SW 2 :IN: The switch signal input.

pin 34: EPM :IN: Pull down.

pin 35: P ON 1 :O: Power ON signal output.

pin 36: PT 2 :IN: The photo sensor signal input.

pin 37: PT 5 :IN: The photo sensor signal input.

pin 38: PT 4 :IN: The photo sensor signal input.

pin 39: PT 3 :IN: The photo sensor signal input.

pin 40: PT 6 :IN: The photo sensor signal input.

pin 41: PT 1 :IN: The photo sensor signal input.

pin 42: M 3 CCW :O: The motor drive signal output.

pin 43: M 3 CW :O: The motor drive signal output.

pin 44: M 2 CCW :O: The motor drive signal output.

pin 45: M 2 CW :O: The motor drive signal output.

pin 46: M 1 CCW :O: The motor drive signal output.

pin 47: M 1 CW :O: The motor drive signal output.

pin 48: RST OUT :O: The reset pulse output.

pin 49: D MUTE :O: Digital mute signal output.

pin 50: HSSW1 :O: The test terminal.

pin 51: ILL :IN: Illumination ON signal input.

pin 52: TEST 4 :IN: For the test.

pin 53: TEST 3 :IN: For the test.

pin 54: TEST 2 :IN: For the test.

pin 55: TEST 1 :IN: For the test.

pin 56: EEP DI :IN: The serial data input from EEPROM.

pin 57: EEP DO :O: The serial data output to EEPROM.

pin 58: EEP CLK :O: The clock pulse output to EEPROM.

pin 59: EEP CE :O: The chip enable pulse output to EEPROM.

pin 60: Destination 1 :IN: The destination setting signal input.

pin 61: Destination 2 :IN: The destination setting signal input.

pin 62: T CLR :O: The clear signal output for the test mode indication.

pin 63: LED CLK :O: The clock pulse output to LED driver.

pin 64: LED STB :O: The strobe pulse output to LED driver.

pin 65: LED CLR :O: The clear pulse output to LED driver.

pin 66: LED DATA :O: The serial data output to LED driver.

pin 67: ILL ON :O: The illumination ON signal output.

pin 68: K IN 0 :IN: The key scan input terminal.

pin 69: K IN 1 :IN: The key scan input terminal.

pin 70: K IN 2 :IN: The key scan input terminal.

pin 71: K IN 3 :IN: The key scan input terminal.

pin 72: K OUT 0 :O: The key scan output terminal.

pin 73: K OUT 1 :O: The key scan output terminal.

pin 74: SHUT :IN: The shutter signal input.

pin 75: GND : - : Ground.

pin 76: ILL AD :IN: The analog voltage input for illumination signal.

pin 77: VDD REF : - : VDD reference voltage.

pin 78: VDD : - : Positive supply voltage.

pin 79: SUB Q :IN: Sub Q data input from the CD IC.

pin 80: NU : - : Not in use.

## EXPLANATION OF IC

052-5047-31 M30621MCM-5P5GP

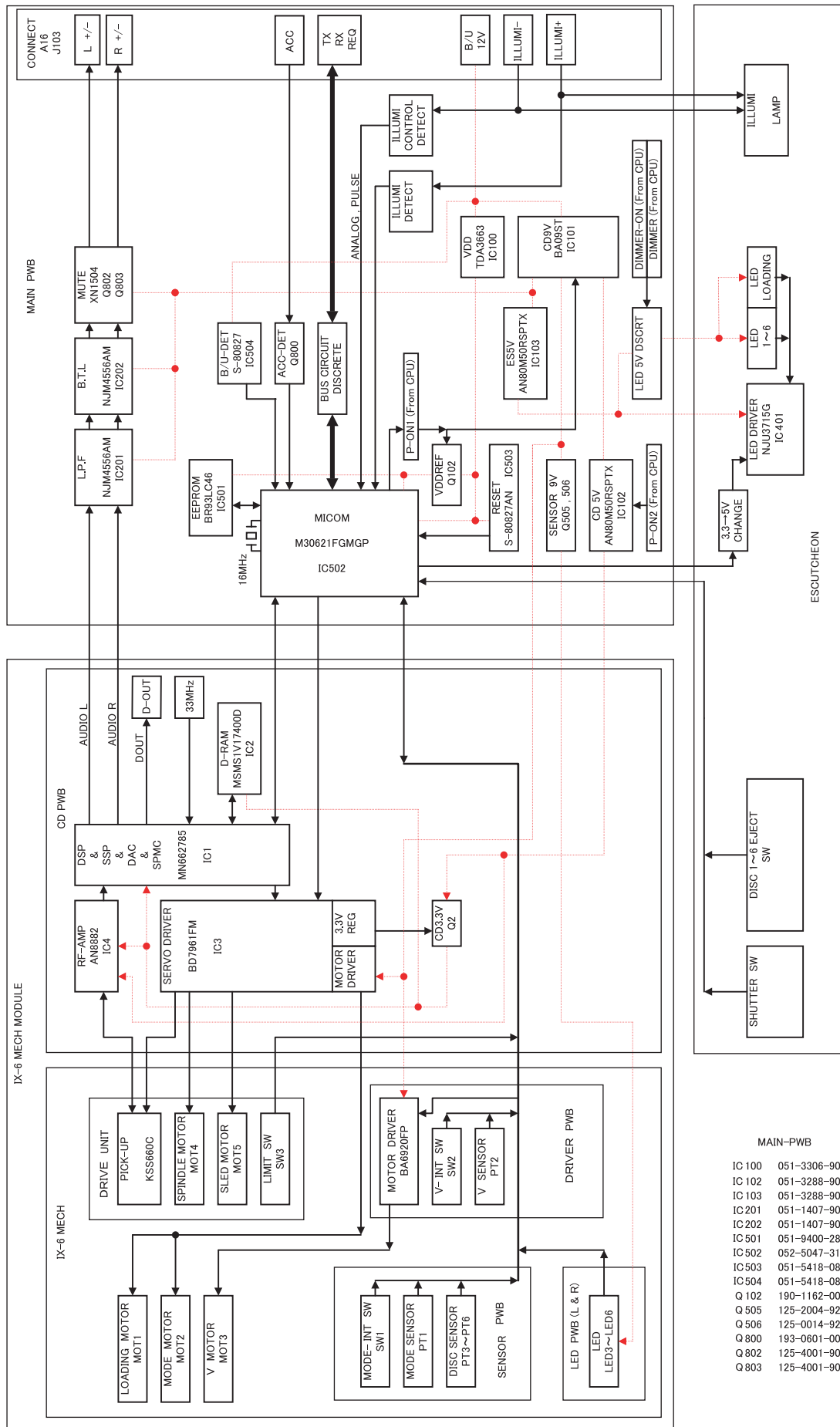
6 CD Auto changer Controller

### 1. Terminal Description

pin 1: SQCK	: O : CD DSP SQCK.
pin 2: DIMMER	: O : The diminution pulse output to the illumination.
pin 3: ILL PULSE	: IN: Illumination control signal input.
pin 4: TCLK	: O : The test clock output.
pin 5: NU	: - : Not in use.
pin 6: CONNECT G	: - : Connect to the ground.
pin 7: M LD O	: O : Load command output to CD-IC.
pin 8: NU	: - : Not in use.
pin 9: RESET	: IN: Reset signal input.
pin 10: X OUT	: O : Crystal connection.
pin 11: GND	: - : Ground.
pin 12: X IN	: IN: Crystal connection.
pin 13: VDD	: - : Positive supply voltage.

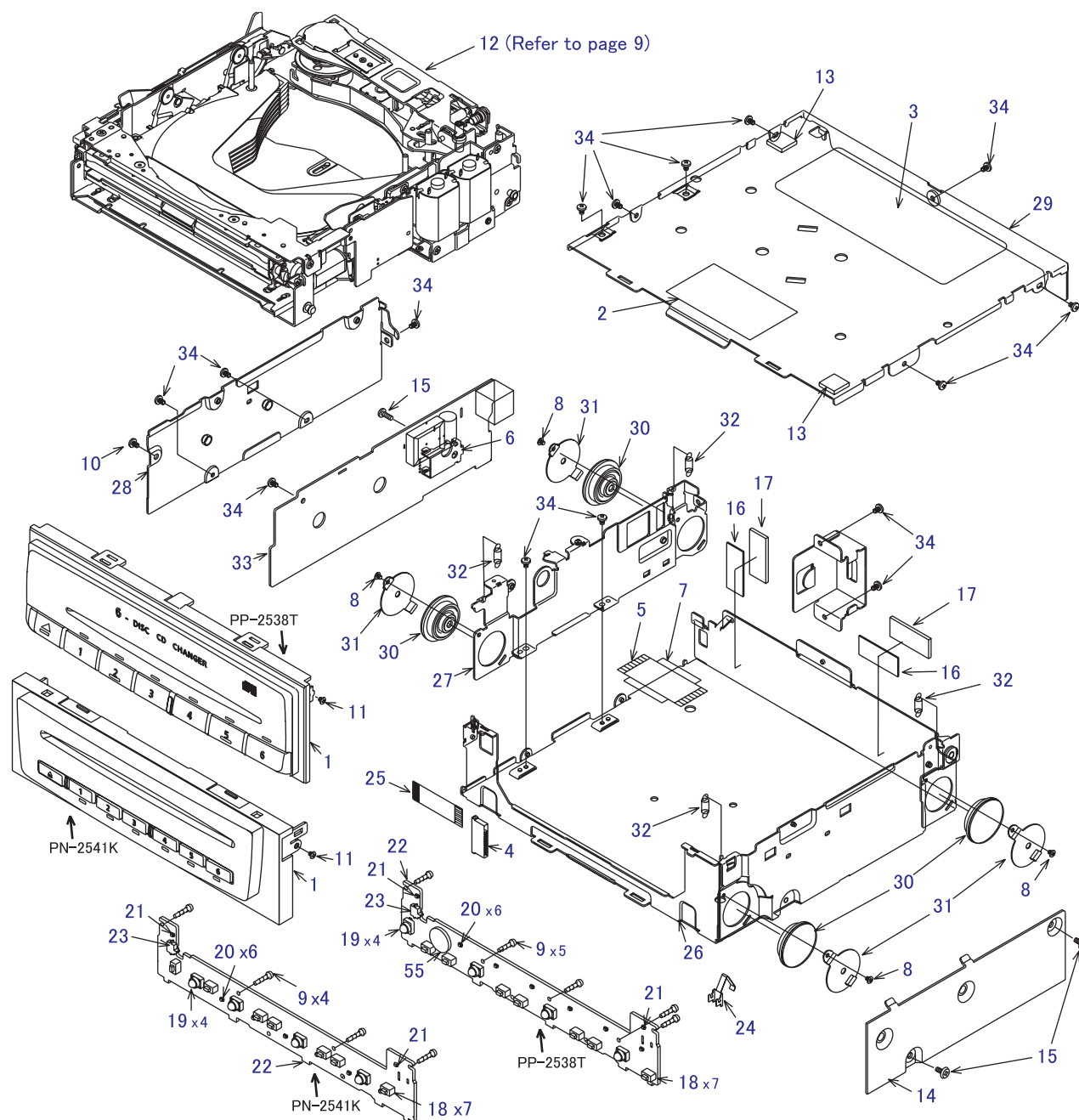
## BLOCK DIAGRAM

## Main/Escutcheon/CD changer module section



# EXPLODED VIEW/PARTS LIST

## Main section



Note) Some parts depend on each model.  
The model name is specified in the description.  
(38T):PP-2538T, (41K):PN-2541K

NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	940-8014-01 940-8015-01	ESCUTCHEON ASSY(38T) ESCUTCHEON ASSY(41K)	1	11	716-3461-00	SCREW M2 x3	1
2	285-1328-00	GUIDE LABEL(38T)	1	12	-----	CD CHANGER MODULE 018200-929	1
3	286-9086-24 286-9086-25	SETPLATE(38T) SETPLATE(41K)	1	13	345-8239-00	CUSHION RUBBER	2
4	074-1239-76	26P OUTLET SOCKET	1	14	331-3497-00	SIDE PLATE	1
5	039-1957-01	FPC	1	15	716-2606-81	MACHINE SCREW M2.6 x6	3
6	331-3267-00	TR-HOLDER	1	16	331-3592-00	PROTECT PLATE	2
7	347-6619-00	INSULATOR	1	17	345-5237-00	CUSHION RUBBER	2
8	716-3450-00	SCREW M1.7 x2	4	18	013-6302-50	SWITCH	7
9	716-0872-01 716-0872-00	PAD SCREW M1.7 x6 (38T) PAD SCREW M1.7 x6 (41K)	5 4	19	017-0433-69	PILOT LAMP 14V40mA	3
10	716-3462-00	SCREW M2 x5	1	20	001-7045-90	DIODE CL-165D/FG	6
				21	001-7043-90	DIODE CL-170FG	2

PP-2538T  
PN-2541K

NO.	PART NO.	DESCRIPTION	Q'TY
22	039-2230-00 039-2231-00	ESCUTCHEON PWB(38T) ESCUTCHEON PWB(41K) (WITHOUT COMPONENT)	1
23	013-7415-50	DETECTOR SWITCH	1
24	331-1861-10	EARTH PLATE	1
25	816-2610-00	FLAT WIRE	1
26	311-1836-02	LOWER CASE	1
27	331-3266-02	PWB HOLDER	1
28	305-0315-05	SIDE CASE	1

NO.	PART NO.	DESCRIPTION	Q'TY
29	310-1741-04	UPPER CASE	1
30	629-0083-00	DAMPER	4
31	620-1086-00	DAMPER-H-PLT	4
32	750-3491-00	FL-SPRING	4
33	039-2232-00	MAIN PWB (WITHOUT COMPONENT)	1
34	716-1716-00	SCREW M2 x3	15

## ELECTRICAL PARTS LIST

### Main PWB section(B1)

Note) Several different parts of the same reference number are alternative parts.  
One of those parts is used in the set.

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C101	168-1045-56	0.1 uF	D603	001-0516-90	MA111	R214	033-1031-15	1/16W 10k ohm
C102	046-1032-78	0.01 uF	D604	001-0516-90	MA111	R215	033-1031-15	1/16W 10k ohm
C104	163-1073-15	6.3V100 uF	D607	001-4302-38	UDZTE-17 33B	R216	033-1031-15	1/16W 10k ohm
C108	184-4773-38	16V470 uF	D608	001-4302-38	UDZTE-17 33B	R218	033-2201-15	1/16W 22 ohm
C109	168-1045-56	0.1 uF	D609	001-0516-90	MA111	R219	033-2201-15	1/16W 22 ohm
C110	178-4742-78	0.47 uF	D701	001-0529-21	MA8039-H(41K)	R220	033-2201-15	1/16W 22 ohm
C111	042-0560-85	6.3V100uF	D703	001-0516-90	MA111(41K)	R221	033-2201-15	1/16W 22 ohm
C112	163-2273-25	10V 220 uF	D801	001-2015-00	RL253	R223	033-3921-15	1/16W 3.9k ohm
C113	168-1045-56	0.1 uF	IC100	051-3306-90	TDA3663AT	R224	033-3921-15	1/16W 3.9k ohm
C114	163-1073-15	6.3V100 uF	IC101	051-3289-00	BA09ST	R225	033-8221-15	1/16W 8.2k ohm
C115	168-1045-56	0.1 uF	IC102	051-3288-90	AN80M50RSPTX	R226	033-8221-15	1/16W 8.2k ohm
C116	178-4742-78	0.47 uF	IC103	051-3288-90	AN80M50RSPTX	R504	033-2221-15	1/16W 2.2k ohm
C117	178-4742-78	0.47 uF	IC201	051-1407-90	NJM4556AM	R505	033-1031-15	1/16W 10k ohm
C118	178-3342-78	0.33 uF	IC202	051-1407-90	NJM4556AM	R509	033-4731-15	1/16W 47k ohm
C119	178-1052-78	1 uF	IC501	051-9400-28	BR93LC46F-WE2	R512	050-0145-54	1/16W 47k ohm x4
C120	178-1052-78	1 uF	IC502	052-5047-31	M30621MCM-5P5GP	R513	033-1041-15	1/16W 100k ohm
C201	163-2263-15	6.3V22 uF	IC503	051-5418-08	S-80827ANMP-EDQ	R514	050-0145-53	1/16W 220k ohm x4
C202	163-2263-15	6.3V22 uF	IC504	051-5418-08	S-80827ANMP-EDQ			J
C203	045-1211-50	120pF	J101	074-1189-95	45P	R515	033-1041-15	1/16W 100k ohm
C204	045-1211-50	120pF	J102	074-1059-76	26P	R518	033-1041-15	1/16W 100k ohm
C205	045-2201-50	22pF	J103	074-1087-12	A16 16P	R520	033-2741-15	1/16W 270k ohm
C206	045-2201-50	22pF	Q100	191-1205-60	2SB1205RST	R521	033-4731-15	1/16W 47k ohm
C207	168-1045-56	0.1 uF	Q101	125-2004-92	RN1402	R522	050-0145-54	1/16W 47k ohm x4
C209	163-1073-15	6.3V100 uF	Q102	190-1162-00	2SA1162	R523	033-4741-15	1/16W 470k ohm
C210	168-1045-56	0.1 uF	Q204	125-2004-92	RN1402	R524	033-4731-15	1/16W 47k ohm
C211	046-3322-58	3300pF	Q505	125-2004-92	RN1402	R525	033-4731-15	1/16W 47k ohm
C212	046-3322-58	3300pF	Q506	125-0014-92	DTA114EK	R527	050-0145-50	1/16W 270 ohm x4
C213	046-6812-58	680pF	Q603	192-2712-00	2SC2712	R528	050-0145-50	1/16W 270 ohm x4
C214	046-6812-58	680pF	Q604	192-2712-00	2SC2712	R529	050-0145-50	1/16W 270 ohm x4
C215	046-1022-58	1000pF	Q605	125-0014-92	DTA114EK	R539	033-4721-15	1/16W 4.7k ohm
C216	046-1022-58	1000pF	Q606	192-2712-00	2SC2712	R540	050-0145-58	1/16W 2.2k ohm x4
C217	163-2273-25	10V 220 uF	Q607	125-2004-92	RN1402	R601	033-5621-15	1/16W 5.6k ohm
C218	163-2273-25	10V 220 uF	Q706	125-2004-92	RN1402(41K)	R606	033-5631-15	1/16W 56k ohm
C219	163-2273-25	10V 220 uF	Q707	193-2118-00	2SD2118(41K)	R609	032-0145-54	1/2W 10 ohm
C220	163-2273-25	10V 220 uF	Q708	125-2004-92	RN1402(41K)	R610	033-2231-15	1/16W 22k ohm
C501	163-1063-35	16V10 uF	Q709	125-2004-92	RN1402(41K)	R611	033-1031-15	1/16W 10k ohm
C502	168-1045-56	0.1 uF	Q711	192-2712-00	2SC2712	R612	033-4731-15	1/16W 47k ohm
C503	168-4735-56	0.047 uF	Q712	131-1188-00	2SB1188	R613	033-1031-15	1/16W 10k ohm
C504	168-1045-56	0.1 uF	Q713	125-2004-92	RN1402	R614	033-1031-15	1/16W 10k ohm
C505	046-2232-78	0.022 uF	Q800	193-0601-00	2SD601A	R615	033-1031-15	1/16W 10k ohm
C602	172-1041-11	0.1 uF	Q801	190-1162-00	2SA1162	R616	033-1031-15	1/16W 10k ohm
C603	046-1022-58	1000pF	Q802	125-4001-90	XN1504	R617	033-4731-15	1/16W 47k ohm
C604	046-1022-58	1000pF	Q803	125-4001-90	XN1504	R620	033-5631-15	1/16W 56k ohm
C605	046-1022-58	1000pF	R100	032-0145-54	1/2W 10 ohm	R621	033-5631-15	1/16W 56k ohm
C621	163-3353-65	50V3.3 uF	R101	033-4711-15	1/16W 470 ohm	R740	032-0145-64	1/2W 470 ohm(41K)
C710	168-1045-56	0.1 uF(41K)	R102	033-2231-15	1/16W 22k ohm	R743	033-4721-15	1/16W 4.7k ohm
C711	163-1063-35	16V10 uF	R103	116-1511-15	1/8W 150 ohm			(41K)
C712	163-4753-55	35V4.7 uF(41K)	R104	116-1511-15	1/8W 150 ohm	R744	033-1041-15	1/16W 100k ohm
C713	163-4753-55	35V4.7 uF(41K)	R105	032-0145-54	1/2W 10 ohm	R745	033-4721-15	1/16W 4.7k ohm
C800	163-1053-65	50V1 uF	R106	032-0145-54	1/2W 10 ohm			(41K)
C801	045-1011-50	100pF	R207	033-6821-15	1/16W 6.8k ohm	R746	033-4731-15	1/16W 47k ohm
C802	046-2222-58	2200pF	R208	033-2731-15	1/16W 27k ohm	R747	033-2231-15	1/16W 22k ohm
C803	046-2222-58	2200pF	R209	033-1031-15	1/16W 10k ohm			(41K)
C804	046-2222-58	2200pF	R210	033-1031-15	1/16W 10k ohm	R748	033-4721-15	1/16W 4.7k ohm
C805	046-2222-58	2200pF	R211	033-6821-15	1/16W 6.8k ohm			(41K)
D100	001-0627-90	U1BC44	R212	033-8221-15	1/16W 8.2k ohm	R749	033-1031-15	1/16W 10k ohm
D101	001-0529-34	MA8062-L	R213	033-2731-15	1/16W 27k ohm	R751	033-1021-15	1/16W 1k ohm



REF No.	PART No.	DESCRIPTION
R800	033-4731-15	1/16W 47k ohm
R801	033-5611-15	1/16W 560 ohm
R802	033-1031-15	1/16W 10k ohm
R803	033-1041-15	1/16W 100k ohm
R804	033-1031-15	1/16W 10k ohm
R805	033-1031-15	1/16W 10k ohm
R806	033-1021-15	1/16W 1k ohm
R807	033-1021-15	1/16W 1k ohm
R808	033-1031-15	1/16W 10k ohm

REF No.	PART No.	DESCRIPTION
R809	033-1031-15	1/16W 10k ohm
R810	033-1031-15	1/16W 10k ohm
R811	033-1031-15	1/16W 10k ohm
R820	116-3031-15	1/8W 30k ohm
R821	116-3031-15	1/8W 30k ohm
R900	033-0000-05	1/16W 0 ohm(38T)
R901	033-0000-05	1/16W 0 ohm(38T)
R910	033-1041-15	1/16W 100k ohm

REF No.	PART No.	DESCRIPTION
R920	033-1041-15	1/16W 100k ohm (41K)
R921	033-0000-05	1/16W 0 ohm(38T)
R922	033-0000-05	1/16W 0 ohm(38T)
R923	033-1041-15	1/16W 100k ohm (41K)
T101	009-0679-00	CHOCK
X501	060-1505-50	10MHz

#### Escutcheon PWB section(B2)

REF No.	PART No.	DESCRIPTION
C402	168-1045-56	0.1 uF
CCT2	050-0145-52	1/16W 1k ohm x4
D401	001-7045-90	CL-165D/FG-D
D402	001-7043-90	CL-170FG-CD
D403	001-7043-90	CL-170FG-CD
D404	001-7045-90	CL-165D/FG-D
D405	001-7045-90	CL-165D/FG-D
D406	001-7045-90	CL-165D/FG-D
D407	001-7045-90	CL-165D/FG-D
D408	001-7045-90	CL-165D/FG-D
D411	001-0655-90	1SS294
D412	001-0655-90	1SS294
IC401	051-6617-08	NJU3715G-TE2
J401	074-1239-76	26P
PL401	017-0433-69	14V40mA
PL402	017-0433-69	14V40mA
PL403	017-0433-69	14V40mA
PL404	017-0433-69	14V40mA
Q401	192-2712-00	2SC2712
Q402	192-2712-00	2SC2712

REF No.	PART No.	DESCRIPTION
Q403	192-2712-00	2SC2712
Q404	192-2712-00	2SC2712
Q406	192-2712-00	2SC2712
R401	119-2211-15	1/16W 220 ohm
R402	119-2211-15	1/16W 220 ohm
R404	119-2211-15	1/16W 220 ohm
R406	119-2211-15	1/16W 220 ohm
R407	119-2211-15	1/16W 220 ohm
R408	119-2211-15	1/16W 220 ohm
R409	119-2211-15	1/16W 220 ohm
R410	119-2211-15	1/16W 220 ohm
R411	119-2211-15	1/16W 220 ohm
R412	119-2211-15	1/16W 220 ohm
R413	119-2211-15	1/16W 220 ohm
R414	119-2211-15	1/16W 220 ohm
R415	119-2211-15	1/16W 220 ohm
R416	119-2211-15	1/16W 220 ohm
R419	033-1031-15	1/16W 10k ohm
R420	033-1031-15	1/16W 10k ohm
R421	033-1031-15	1/16W 10k ohm

REF No.	PART No.	DESCRIPTION
R422	033-1031-15	1/16W 10k ohm
R423	033-1031-15	1/16W 10k ohm
R424	033-1031-15	1/16W 10k ohm
R425	033-1031-15	1/16W 10k ohm
R426	033-1031-15	1/16W 10k ohm
R428	119-2211-15	1/16W 220 ohm
R429	119-1021-15	1/16W 1k ohm
R430	119-1021-15	1/16W 1k ohm
S401	013-6302-50	SKQMAL
S402	013-6302-50	SKQMAL
S403	013-6302-50	SKQMAL
S404	013-6302-50	SKQMAL
S405	013-6302-50	SKQMAL
S406	013-6302-50	SKQMAL
S407	013-6302-50	SKQMAL
S408	013-7415-50	SPVG110400
X401	060-0297-00	PKM13EPP-4002 (38T)
X401	060-8045-00	PKLCS1212E4001-R (41K)

#### CD PWB section(B3) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
C2	046-1022-58	1000pF
C3	168-1042-78	16V 0.1 uF
C4	042-0636-54	4V220 uF
C5	168-1042-78	16V 0.1 uF
C6	046-1032-78	0.01 uF
C7	168-1042-78	16V 0.1 uF
C8	178-4742-78	0.47 uF
C9	178-2242-78	0.22 uF
C10	168-1042-78	16V 0.1 uF
C11	168-1042-78	16V 0.1 uF
C12	168-1042-78	16V 0.1 uF
C13	046-2232-78	0.022 uF
C14	168-5612-55	560pF
C15	168-1042-78	16V 0.1 uF
C16	046-2212-58	220pF
C17	046-2212-58	220pF
C18	168-1222-55	1200pF
C19	046-3322-58	3300pF
C20	168-3932-78	0.039 uF
C21	168-3932-78	0.039 uF
C22	042-0416-52	10V10 uF TAN
C25	178-1052-78	1 uF
C26	042-0472-91	16V47 uF
C27	178-3342-78	0.33 uF
C29	168-2732-55	16V 0.027 uF
C30	042-0416-58	4V100 uF
C31	042-0636-52	4V47 uF
C32	046-1022-58	1000pF
C33	046-3322-58	3300pF
C34	168-2732-55	16V 0.027 uF
C35	178-2742-78	0.27 uF
C36	178-1052-78	1 uF
C37	168-1042-78	16V 0.1 uF
C38	042-0472-91	16V47 uF
C39	042-0636-50	6.3V100 uF

REF No.	PART No.	DESCRIPTION
C40	045-1211-50	120pF
C41	045-5601-50	56pF
C42	168-1042-78	16V 0.1 uF
C43	042-0636-52	4V47 uF
C50	168-1042-78	16V 0.1 uF
C51	168-1042-78	16V 0.1 uF
C60	168-5612-55	560pF
D1	001-0367-91	1SS226
IC1	051-6365-00	MN662785TBUC
IC2	051-9318-00	MSM51V17400D-60TS-K
IC2	051-9318-51	K4E160412C-FC60
IC3	051-6060-08	BD7961FM-E2
IC4	051-5711-90	AN8882SB-E1
J1	074-1189-95	45P
J4	074-1138-56	6P
J5	074-1201-65	15P
J6	074-1059-76	26P
L2	010-3050-93	10 uH
L2	010-2155-93	10 uH
Q2	131-1188-00	2SB1188
Q3	131-1188-00	2SB1188
R2	033-1041-15	1/16W 100k ohm
R4	033-3311-15	1/16W 330 ohm
R5	033-1041-15	1/16W 100k ohm
R6	033-3931-15	1/16W 39k ohm
R7	033-1041-15	1/16W 100k ohm
R8	033-5611-15	1/16W 560 ohm
R9	033-5611-15	1/16W 560 ohm
R10	033-1011-15	1/16W 100 ohm
R11	033-3911-15	1/16W 390 ohm
R12	033-2221-15	1/16W 2.2k ohm
R13	033-6831-15	1/16W 68k ohm
R14	033-5621-15	1/16W 5.6k ohm
R15	033-1021-15	1/16W 1k ohm

REF No.	PART No.	DESCRIPTION
R16	033-5631-15	1/16W 56k ohm
R17	033-1031-15	1/16W 10k ohm
R18	033-1031-15	1/16W 10k ohm
R19	033-5621-15	1/16W 5.6k ohm
R20	033-6831-15	1/16W 68k ohm
R21	033-5621-15	1/16W 5.6k ohm
R22	033-1031-15	1/16W 10k ohm
R23	033-1031-15	1/16W 10k ohm
R24	033-4731-15	1/16W 47k ohm
R25	033-3931-15	1/16W 39k ohm
R26	033-6831-15	1/16W 68k ohm
R27	033-6831-15	1/16W 68k ohm
R28	033-1031-15	1/16W 10k ohm
R29	033-2201-15	1/16W 22 ohm
R31	033-8211-15	1/16W 820 ohm
R32	033-5631-15	1/16W 56k ohm
R33	033-6831-15	1/16W 68k ohm
R34	033-3331-15	1/16W 33k ohm
R35	033-6831-15	1/16W 68k ohm
R38	033-3931-15	1/16W 39k ohm
R39	033-1831-15	1/16W 18k ohm
R40	117-1001-15	1/10W 10 ohm
R41	033-6821-15	1/16W 6.8k ohm
R42	033-6821-15	1/16W 6.8k ohm
R43	033-1241-15	1/16W 120k ohm
R44	033-6831-15	1/16W 68k ohm
R45	116-4711-15	1/8W 470 ohm
R46	117-1811-15	1/10W 180 ohm
R47	116-4711-15	1/8W 470 ohm
R48	033-1031-15	1/16W 10k ohm
R49	033-1011-15	1/16W 100 ohm
R60	033-1031-15	1/16W 10k ohm
TM1	073-0768-90	TERMIMAL
X1	060-1527-90	33.8688MHz

### Sensor PWB section(B4) : CD changer mechanism

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
PT3	060-0252-01	PT4850F	PT5	060-0252-01	PT4850F	S1	013-7414-50	SPVG22
PT4	060-0252-01	PT4850F	PT6	060-0252-01	PT4850F			

### PIM-FPC section(B5) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
IC5	051-5806-02	GPIS95

### Driver PWB section(B6) : CD changer mechanism

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C1	168-1045-56	0.1 uF	J1	074-1239-76	26P	R3	032-0104-59	1/4W 2.2 ohm
C2	163-1073-35	16V100 uF	J2	074-1100-59	9P	S1	013-7412-50	SPVG21
D1	001-0529-29	MA8051-M	R1	033-1021-15	1/16W 1k ohm			
IC1	051-6044-18	BA6920FP-Y	R2	032-0104-59	1/4W 2.2 ohm			

### PIV-FPC section(B7) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
IC6	051-5806-01	GPIS93

### LED-L-PWB section(B8) : CD changer mechanism

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
LED3	001-7042-00	GL4800	LED4	001-7042-00	GL4800

### LED-R-PWB section(B9) : CD changer mechanism

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
LED5	001-7042-00	GL4800	LED6	001-7042-00	GL4800

### L-Motor-FPC section(B10) : CD changer mechanism

REF No.	PART No.	DESCRIPTION
M1	SMA-186-100	LOADING

### M/S-FPC section(B11) : CD changer mechanism

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
M2	SMA-185-100	SPINDLE	M3	SMA-184-100	SLED	S2	013-7414-50	SPVG22

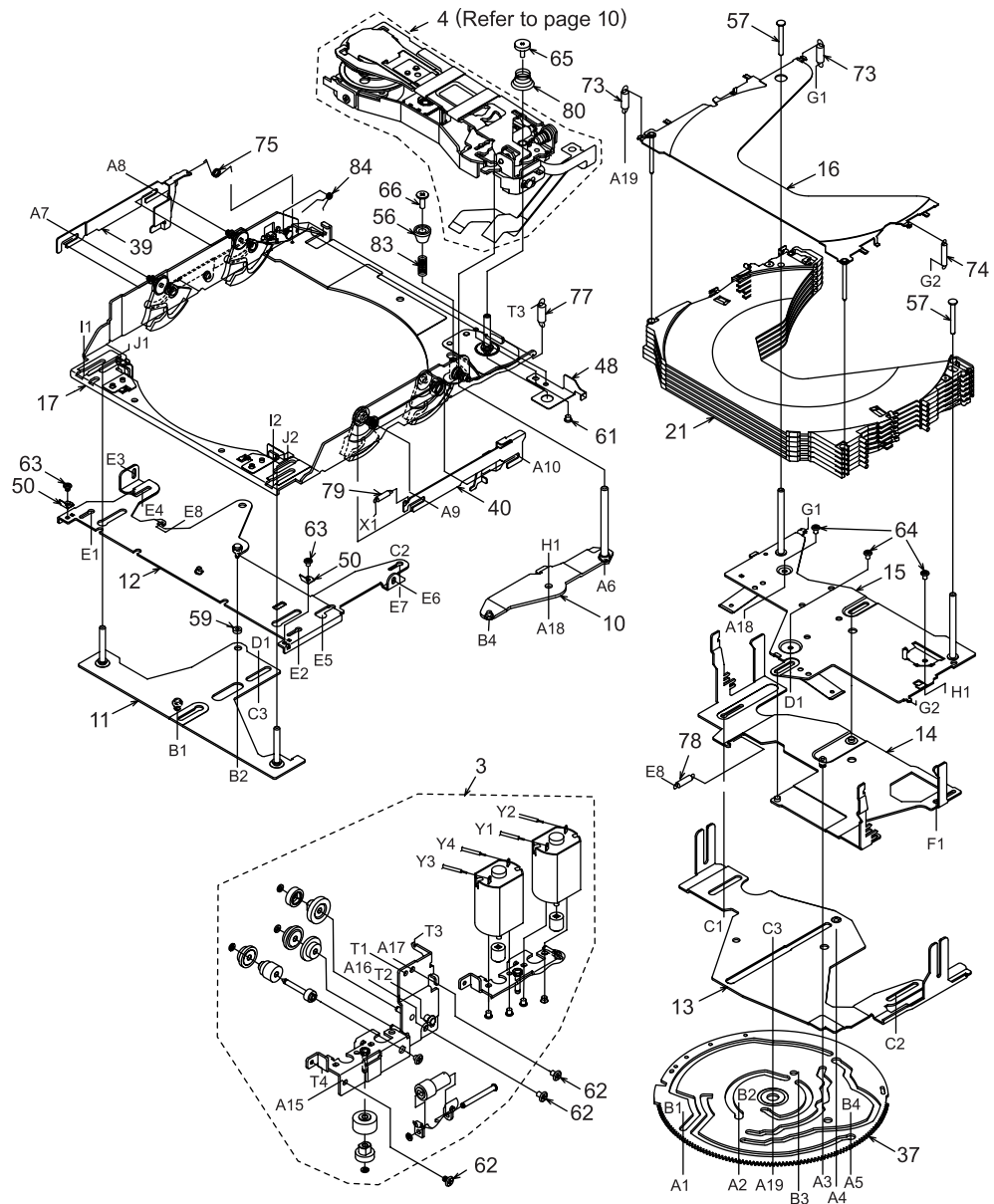
## EXPLODED VIEW/PARTS LIST

### CD changer mechanism section : Main chassis

NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	HBS-521-100	LOADING UNIT (WITHOUT MOTOR)	1	17	966-0611-05	DR-BASE-P-ASSY	1
2	SMA-186-100	LOADING MOTOR ASSY	1	18	966-0615-01	LOCK-L-RF-ASSY	1
3	HBS-512-100	MOTOR PLATE SUB ASSY	1	19	966-0616-20	LOCK-L-LF-ASSY	1
4	HBS-513-103	DRIVE UNIT	1	20	966-0618-21	EJECT-B-ASSY	1
5	039-2233-00	CD PWB (WITHOUT COMPONENT)	1	21	966-0624-23	DISC-HOL-ASSY	1
6	039-2242-00	DRIVER PWB (WITHOUT COMPONENT)	1	22	001-7042-00	DIODE (GL4800)	4
7	966-0597-23	CHASSIS ASSY	1	23	013-7414-50	DETECTOR SWITCH	1
8	966-0600-21	LOCK-P-RE-ASSY	1	24	039-1954-00	LED-L-PWB (WITHOUT COMPONENT)	1
9	966-0601-21	M-GEAR-P-ASSY	1	25	039-1955-00	LED-R-PWB (WITHOUT COMPONENT)	1
10	966-0602-23	DR-LINK-ASSY	1	26	039-1956-00	SENSOR PWB (WITHOUT COMPONENT)	1
11	966-0603-20	MODE-P-ASSY	1	27	039-2009-00	PIM FPC	1
12	966-0604-22	LOCK-PF-ASSY	1	28	039-2010-00	RIV-FOC	1
13	966-0605-20	SHIFT-P-ASSY	1	29	039-2011-00	LED-FPC	1
14	966-0606-23	HLC-PLATE-ASSY	1	30	039-2012-00	SENSOR-FPC	1
15	966-0607-24	COV-OLATE-ASSY	1	31	039-2013-00	MOS-FPC	1
16	966-0610-06	TOP-PLATE-ASSY	1	32	039-2014-00	L-MOTOR-FPC (WITHOUT COMPONENT)	1



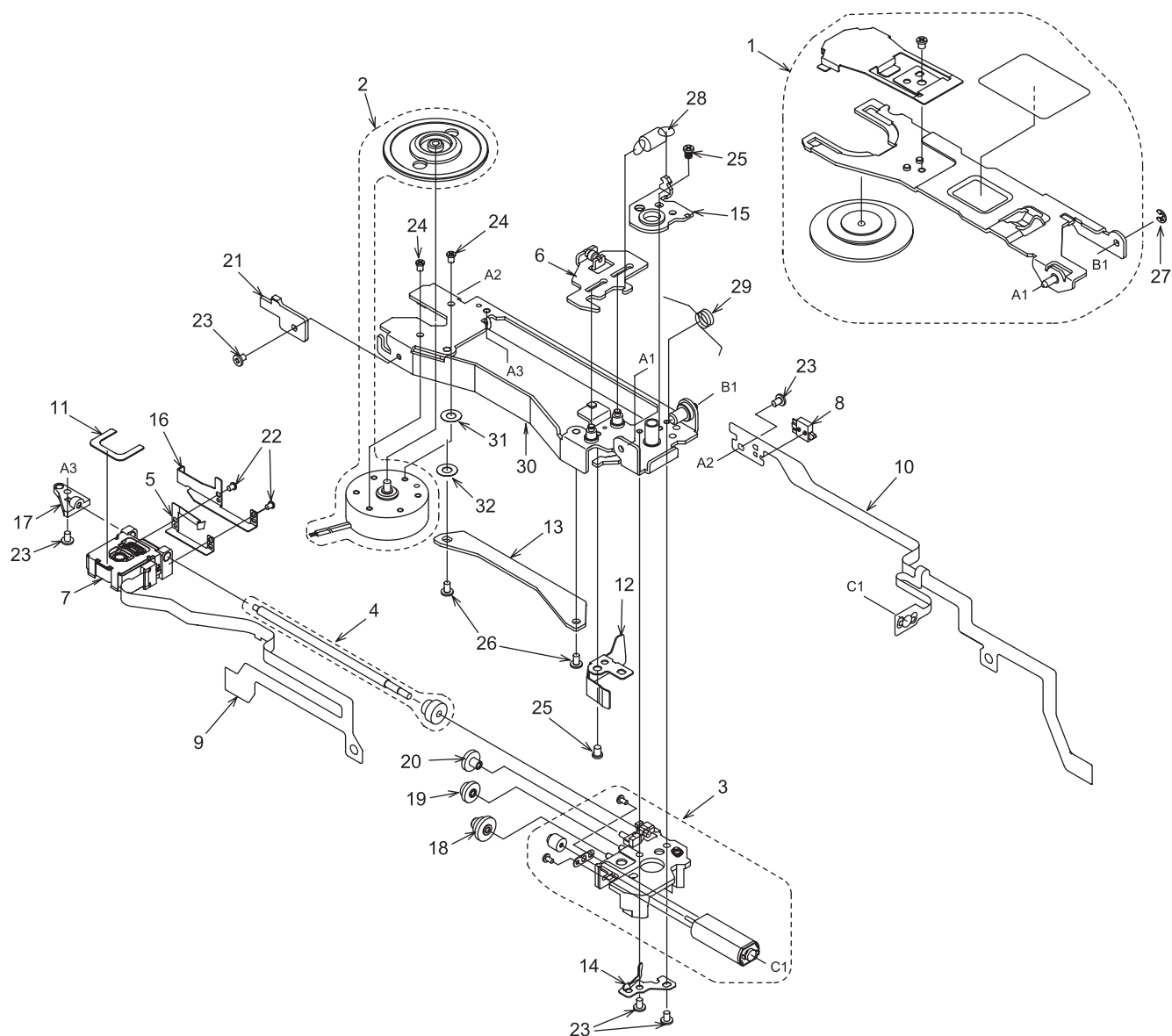




NO.	PART NO.	DESCRIPTION	Q'TY
51	621-0640-20	V-GEAR-G	1
52	621-0641-21	PI-HOLDER-M	1
53	621-0656-21	PI-HOLDER-V	1
54	622-1622-00	SL-G-ROLLER	2
55	622-1623-00	SL-G-ROLLER-R	2
56	622-1648-02	DU-STP-SLEEVE	1
57	622-1650-02	COV-PLATE PIN-B	2
58	622-1651-00	LOCK-RE-ROLLER	1
59	622-1652-00	LOCK-PF-ROLLER	1
60	716-1866-00	SCREW(M1.7 x3)	4
61	716-1873-00	SCREW(M2 x1.6)	1
62	716-3449-00	SCREW(M2 x3)	15
63	716-3450-00	SCREW(M1.7 x2)	4
64	716-3451-00	SCREW(M1.7 x2.5)	4
65	716-3459-00	SCREW(M1.7 x5)	1
66	716-3466-02	SCREW	1
67	738-1422-11	PRECISION SCREW	2
68	743-1200-20	E-RING	2

NO.	PART NO.	DESCRIPTION	Q'TY
69	743-1500-20	E-RING	13
70	746-0624-00	WASHER	1
71	746-0712-03	WASHER	1
72	746-0761-00	WASHER	1
73	750-3478-01	TOP-P-SP-L	2
74	750-3479-01	TOP-P-SP-R	1
75	750-3480-01	DR-LOCK-SP	1
76	750-3483-00	EJECT-A-SPRING	1
77	750-3484-01	DR-BASE-SPRING	1
78	750-3485-01	TENSION-SP-L	1
79	750-3486-01	LO-TENSION-SP	1
80	750-3489-00	DRIVE-P-SPRING	1
81	750-3496-00	GAP-P-SPRING R	1
82	750-3497-00	GAP-P-SPRING L	1
83	750-6711-01	DU-STP-SPRING	1
84	750-6712-01	DR-LOCK-SP-B	1
85	621-0651-22	LOAD GEAR-A	1
86	347-6974-00	FPC COVER	1

# CD changer mechanism section : Drive unit

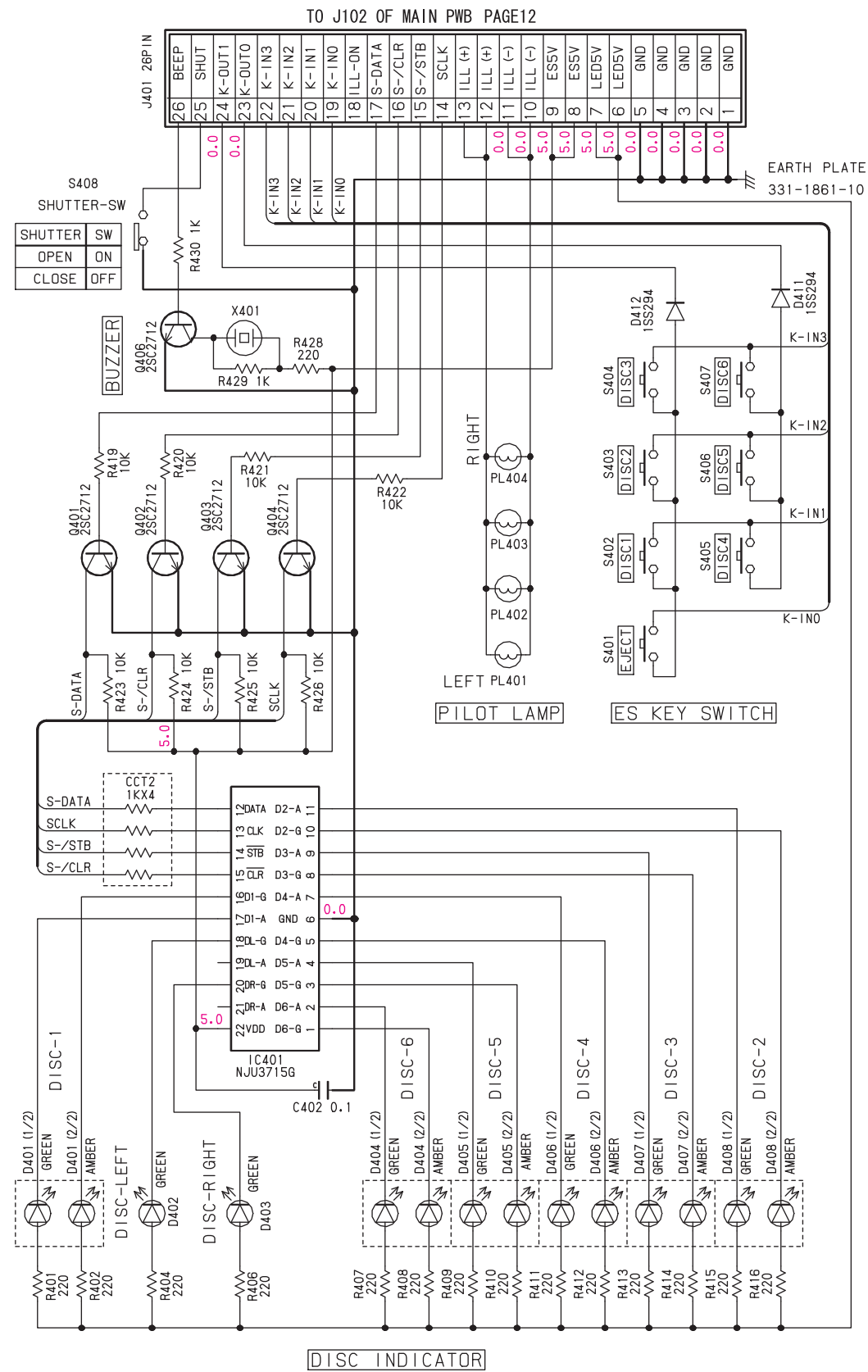


NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	HBS-514-100	CLAMPER SUB ASSY	1	17	621-0670-20	LS-HOLDER-L	1
2	SMA-185-100	SPINDLE MOTOR ASSY	1	18	621-0673-20	D-GEAR A	1
3	SMA-184-100	SLED MOTOR ASSY	1	19	621-0674-20	D-GEAR B	1
4	HBS-515-101	LS-ASSY	1	20	621-0675-20	D-GEAR C	1
5	620-1587-00	SH-SP-PLT	1	21	621-0683-21	DU-STOPPER	1
6	966-0622-22	D-SHIFT-P-ASSY	1	22	716-3460-00	SCREW(M1.4 x 1.8)	2
7	969-0009-00	PICK UP-ASSY	1	23	716-3470-00	SCREW(M1.7 x 3)	5
8	013-7414-50	DETECT SWITCH	1	24	738-1722-17	PRECISION SCREW	2
9	039-2015-01	P/U-FPC	1	25	738-2025-17	PRECISION SCREW	2
10	039-2016-01	M/S-FPC	1	26	716-3474-00	SCREW(M1.7 x 3)	2
11	347-6632-00	PU-SHEET	1	27	743-1500-20	E-RING	1
12	620-1078-20	PUSH PLATE	1	28	750-3487-00	SHIFT-P-SPRING	1
13	620-1080-21	PU-GUIDE PLATE	1	29	750-3504-00	CLAMP-A-SPRING	1
14	620-1081-20	SCREW PUSH-PLT	1	30	966-0619-24	DRIVE PLT-ASSY	1
15	620-1082-22	SPRING PLATE	1	31	745-0807-00	WASHER	1
16	620-1588-20	SCREW-HOL-PLT	1	32	745-0808-00	WASHER	1

A L-CH +

CURCUIT DIAGRAM  
Escutcheon PWB(B2) section

CURCUIT DIAGRAM  
Escutcheon PWB(B2) section



DISC INDICATOR

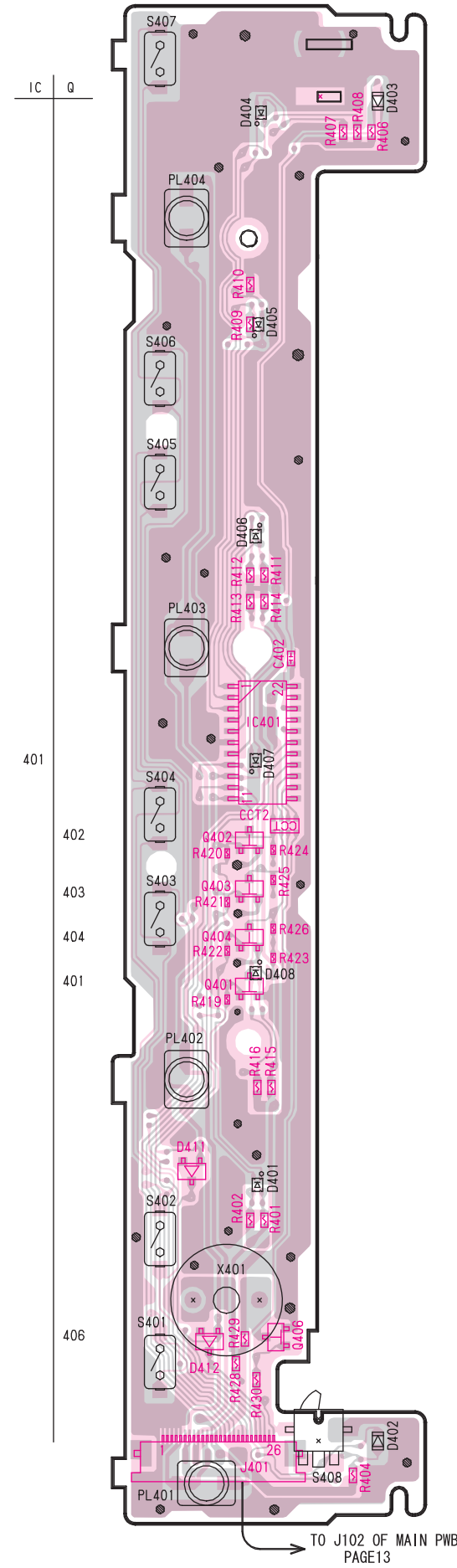
- 11 -

PP-2538T-A  
PN-2541K-A

PRINTED WIRING BOARD  
Escutcheon PWB(B2) section

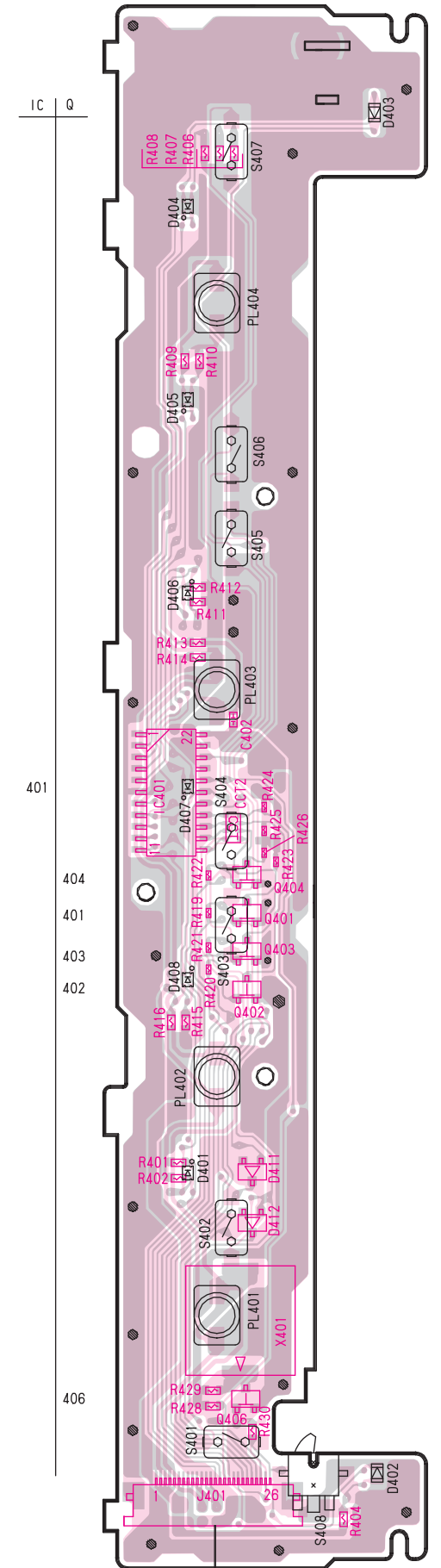
PRINTED WIRING BOARD  
Escutcheon PWB(B2) section

PP-2538T-A



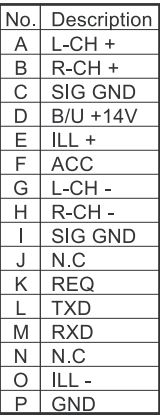
TO J102 OF MAIN PWB  
PAGE13

PN-2541K-A



TO J102 OF MAIN PWB  
PAGE13

Main PWB (B1) section





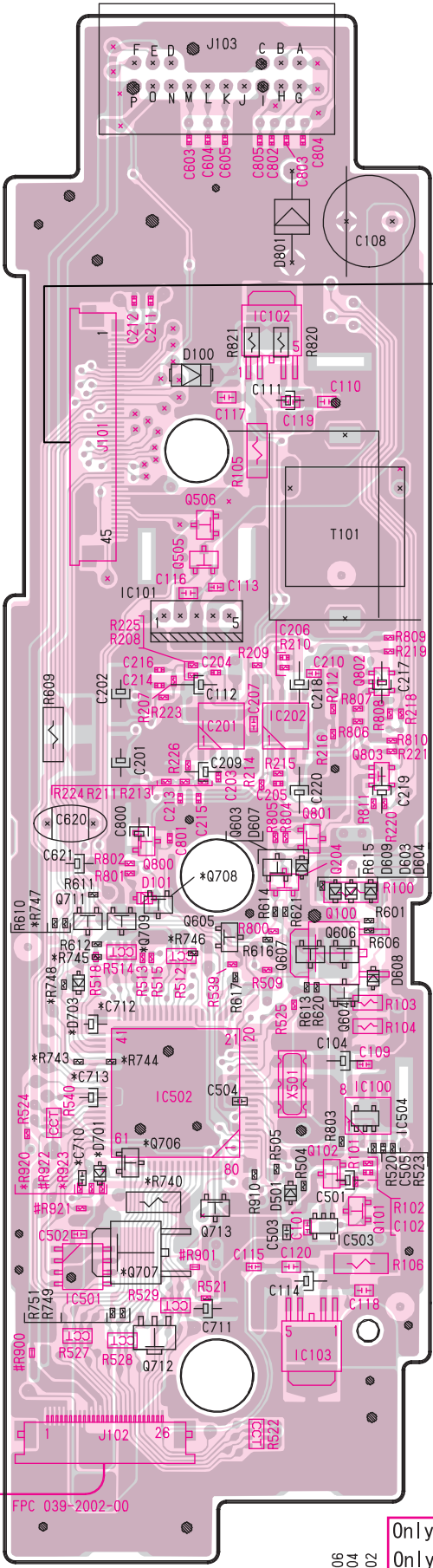
PRINTED WIRING BOARD

Main PWB(B1) / CD changer mechanism(B3-B11) section

No.	Description
A	L-CH +
B	R-CH +
C	SIG GND
D	B/U +14V
E	ILL +
F	ACC
G	L-CH -
H	R-CH -
I	SIG GND
J	N.C
K	REQ
L	TXD
M	RXD
N	N.C
O	ILL -
P	GND

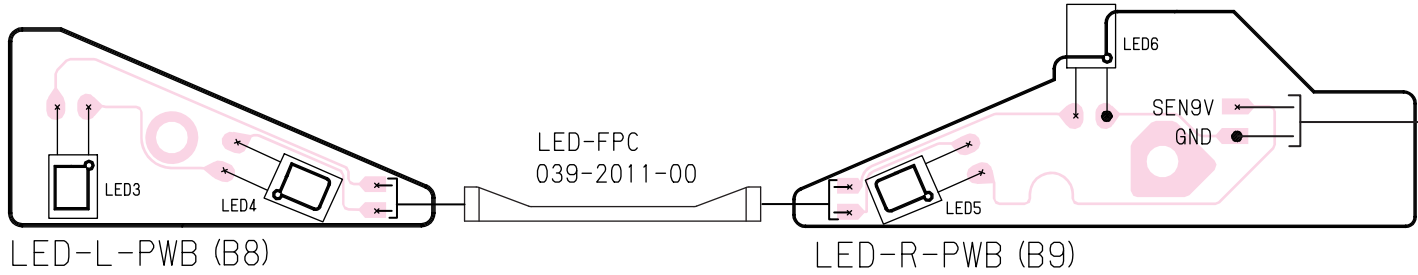
TO J401 OF ESCUTCHEON PWB  
(PAGE 11)

MAIN PWB (B1) This PWB is 4 layers patten.

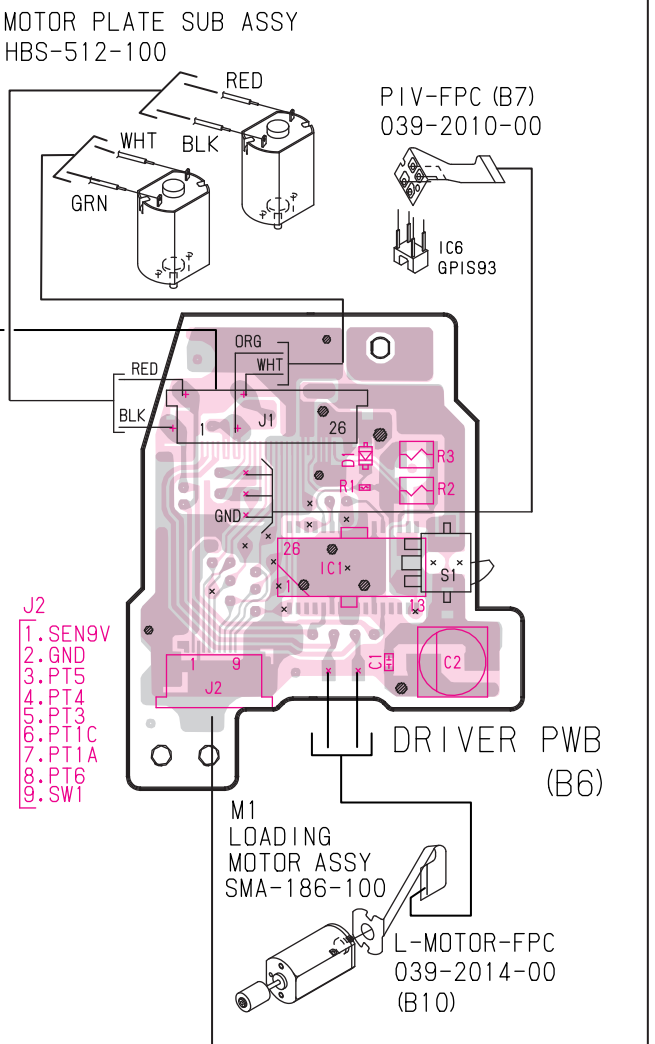
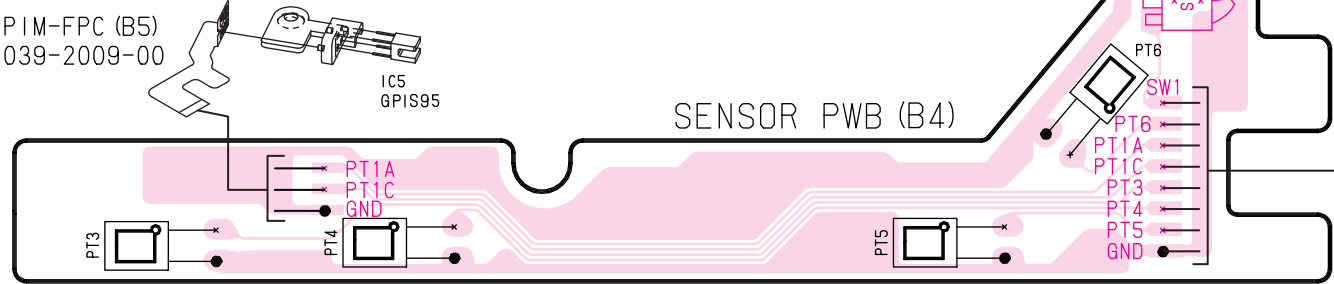
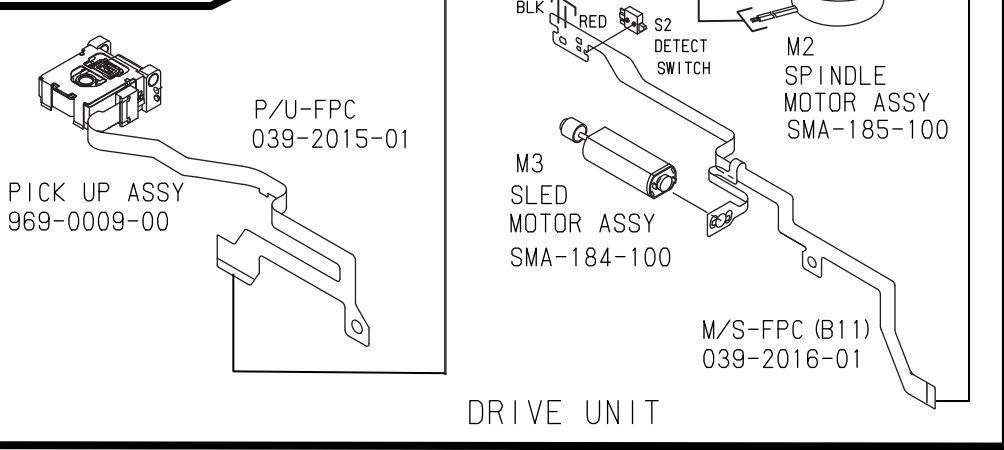
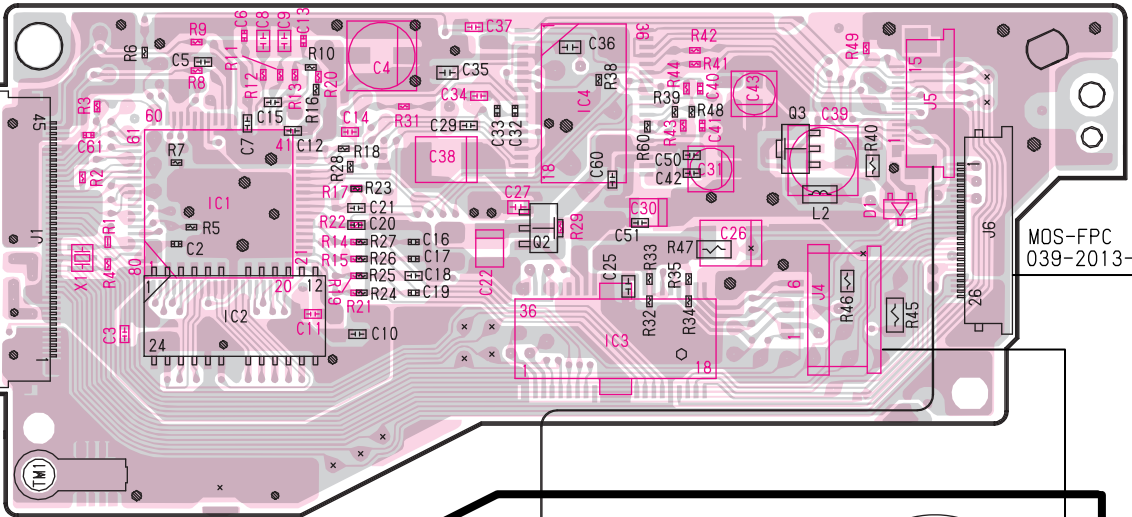


IC	Q
501	711
	709
	707
	706
	800
502	708
101	712
	505
201	506
	713
	605
	603
202	204
102	607
103	801
503	102
	100
	606
100	101
504	803
	808

Only PP2538T used # mark parts.  
Only PN2541K used \* mark parts.



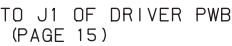
CD PWB (B3) CD PWB HAS 4 LAYERS.



MARKS ● AND MARKS GND ARE ON THE GROUND OF THE DIP LAYER.



## CD PWB (B3) section



Sensor PWB(B4) / PIM-FPC(B5) / Driver PWB(B6) / PIV-FPC(B7)  
/ LED-L-PWB(B8) / LED-R-PWB(B9) / L-Motor-FPC(B10) section : CD changer mechanism

